

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of maximizing the number of sessions according to an operating situation of a server that has an application program, a client-network manager, a central processing unit, a memory, an operating system and a network for stably providing a multimedia information service to a client in a network environment in which the server and a plurality of clients are connected with each other and the server dynamically decides whether to provide or not provide a multimedia service sessions according to a request of a client, comprising:

a service requesting step in which one of the plurality of clients requests a multimedia service from the server;

a capability negotiation step comprising (1) evaluating resource use amount of a multimedia resource requested by one client; (2) evaluating an available amount of server resources including a CPU and a memory of the server; ~~(2)~~ (3) evaluating an available amount of a bandwidth of a network connecting the server and the clients; and ~~(3)~~ (4) evaluating an available amount of a CPU and a memory of the one client, in which it is evaluated whether the server is to generate a new session to provide the multimedia service according to the request by the one client;

a service providing step in which the server provides the multimedia service to the one client through the capability negotiation; and

a service session refusal step wherein the server refuses to generate a new session if the allocated resources are not receivable even in one of the capability negotiation steps (1)-(3);

wherein the number of sessions according to the operating situation of a server for a multimedia service in a network environment is maximized.

2-3. (Canceled)

4. (Currently amended) An apparatus maximizing the number of sessions according to an operating situation of a server that has an application program, a client-network manager, a central processing unit, a memory, an operating system and a network for stably providing a multimedia information service to a client in a network environment in which the server and plurality of clients are connected with each other and the server provides a multimedia service sessions according to a request of a client, comprising:

a client from the plurality of clients who requests the multimedia service from the server;

the server for determining whether a new session is to be generated to provide the multimedia service according to the request of the client without predetermining the number of sessions provided by the server to clients;

means for monitoring service requests for multimedia service by the plurality of clients from the server;

means for conducting a capability negotiation comprising (1) evaluating resource use amount of a multimedia resource requested by one client; (2) means for evaluating an available amount of a CPU and a memory of the server; (3) means for evaluating an available amount of a bandwidth of a network connecting the server and the clients; and (4) means for evaluating an available amount of a CPU and a memory of the one client, to determine whether the server is to generate a new session to provide the multimedia service according to the request of at least one client;

means for having the server provide the multimedia service to the at least one client through the capability negotiation; and

means for making the server refuse to generate a new session if the allocated resources are not receivable even in one of steps conducted by the means for conducting a capability negotiation;

wherein the number of sessions according to the operating situation of a server for a multimedia service in a network environment is maximized.

5. (Previously presented) The apparatus according to claim 4, wherein the server comprises:

an application program part for providing an information service supporting an application processing procedure of a user;

an operating system for providing a service required for the application program part to use a hardware and a software; and

a network part for establishing, maintaining, terminating of a connection, and managing of address assigning, path selecting and network function selecting.

6. (Original) The apparatus according to claim 4, wherein the server provides a text or a multimedia data to a client.

7. (Currently Amended) The apparatus according to claim 4,
wherein the means for conducting the capability negotiation evaluates an available amount of resources including a CPU and a memory of itself, a network bandwidth, and a CPU and a memory of the client, and

wherein in case that the resources are available to use, means for making the server generates the new session, while in case that even one of the resources are not available to use, to make the server ~~refuses~~ refuse to generate the new session.

8. (Previously Presented) The apparatus according to claim 5, wherein the application program part includes a client-network manager to check the resource allocation amount with respect to the CPU and the memory from the operating system, check the resource allocation amount with respect to the network bandwidth from the network part, and check the resource allocation amount with respect to the CPU and the memory of the client.

9. (Currently amended) A method for a server for maximizing the number of sessions according to an operating situation of the server that has an application program, a

client-network manager, a central processing unit, a memory, an operating system and a network for stably providing a multimedia information service to a client in a network, the method comprising:

receiving a request from a client of the network for the multimedia service;

determining whether sufficient resources are available to provide the requested multimedia service to the client by (1) determining the amount of resources according to a multimedia use form requested by the client; (2) determining whether the server's available amount of CPU is sufficient; ~~(2)~~ (3) determining whether the server's available amount of memory is sufficient; ~~(3)~~ (4) determining whether the network's available amount of bandwidth is sufficient; ~~(4)~~ (5) determining whether the client's available amount of CPU is sufficient; and ~~(5)~~ (6) determining whether the client's available amount of memory is sufficient; and

generating a session between the server and the client when it is determined that sufficient resources are available to provide the requested multimedia service;

wherein if at least one of the amounts of the available server CPU, the server memory, the network bandwidth, the client CPU, and the client memory is deemed to be not sufficient, the determining step determines that sufficient resources are not available, and

wherein the number of sessions according to the operating situation of a server for a multimedia service in a network environment is maximized.

10-11. (Canceled)

12. (Currently amended) A server for maximizing the number of sessions according to an operating situation of the server for a multimedia service in a network, comprising:

a request receiving part configured to receive a request from a client of the network for the multimedia service;

a determination part to determine whether sufficient resources are available to provide the requested multimedia service to the client, wherein the determination part is configured to (1) determine the amount of resources according to a multimedia use form requested by the client;

(2) determine whether the server's available amount of CPU is sufficient; ~~(2)~~ (3) determine whether the server's available amount of memory is sufficient; ~~(3)~~ (4) determine whether the network's available amount of bandwidth is sufficient; ~~(4)~~ (5) determine whether the client's available amount of CPU is sufficient; and ~~(5)~~ (6) determine whether the client's available amount of memory is sufficient; and

a session generator to generate a session between the server and the client when the determination part determines that sufficient resources are available to provide the requested multimedia service;

wherein if at least one of the amounts of the available server CPU, the server memory, the network bandwidth, the client CPU, and the client memory is deemed to be not sufficient, the determination part is configured to determine that sufficient resources are not available; and

wherein the number of sessions according to the operating situation of a server for a multimedia service in a network environment is maximized.

13.-14. (Canceled)